CLAIMS

- A method for producing polyphenylene ether, which comprises
- 5 (a) a step for synthesizing polyphenylene ether by subjecting phenol to oxidative polymerization in the presence of a copper compound and amines in an aromatic compound solvent,
 - (b) a step for precipitating polyphenylene ether particles by adding methanol into the solution of polyphenylene ether
- in the aromatic compound solvent obtained by the step (a),
 (c) a step for solid-liquid separating a slurry of
 - polyphenylene ether obtained by the step (b), and then washing the separated polyphenylene ether particles with methanol
 - to obtain the polyphenylene ether,
- 15 (d) a step for adding water to a filtrate obtained by the step (c) to mix them, and then liquid-liquid separating the
- mixture into a phase consisting mainly of the aromatic compound and a phase consisting mainly of methanol and water, and
 - (e) a step for supplying the phase consisting mainly of methanol
- 20 and water, obtained at the step (d) to the middle portion
- of a distilled column to perform distillation, and separating
 - out a distillate liquid consisting mainly of methanol, a bottom
 - liquid consisting mainly of water and a side-cut liquid containing the amines by distillation, recycling the
- 25 distillate liquid consisting mainly of methanol as methanol
 - of the steps (b) and (c), and recycling the side-cut liquid
 - as part of the filtrate of the step (d).
- The method of claim 1, wherein the amines are amines
 which make an azeotrope with water.
 - 3. The method of claim 1, wherein the amount of methanol added at the step (b) is 1 to 2 times by weight of the aromatic compound in the solution.

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- 4. The method of claim 1, wherein water is added so that the weight ratio of water/methanol in the liquid-liquid separated raw material solution in the step (d) is 0.5 to 1.5.
- 5. The method of claim 1, wherein the phase consisting mainly of methanol and water, to be distilled in the step (e) contains 40 to 60 wt% of methanol, 40 to 60 wt% of water and 0.1 to 0.3 wt% of the amines.
- 6. The method of claim 1, wherein the amount of side-cut liquid is 0.5 to 5 wt% based on the phase consisting mainly of methanol and water, to be distilled.
- 7. The method of claim 1, the concentration of the amines in the distillate solution in the step (e) is less than 0.1 wt% and the concentration of the amines in the bottom liquid is less than 0.01 wt%.
- 8. The method of claim 1, wherein an anti-foaming agent and/or sodium hydroxide are/is added to the phase consisting mainly of methanol and water, to be distilled in the step (e), and carrying out side-cut between the stage supplying a raw material and the top of the distillation column.